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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

LY, ANH VU H

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/600,295	Applicant(s) WU ET AL.	
	Examiner ANH-VU H. LY	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 13-40 and 42-50 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10, 14-24, 39, 40 and 42-50 is/are allowed.
- 6) ☒ Claim(s) 13 and 25-38 is/are rejected.
- 7) ☒ Claim(s) 1 and 13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 1 and 13 are objected to because of the following informalities:

With respect to claims 1 and 13, in line 2, insert --data-- before “network”.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 13 and 25-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johansson et al (US Pub 2002/0089968 A1) in view of Vance, Jr et al (US Pub 2004/0121785 A1). Hereinafter, referred to as Johansson and Vance.

With respect to claims 13 and 25, Johansson discloses a communication system (Fig. 2), comprising:

a circuit switched network (Fig. 2, circuit-switched connection between wireless communication 20 and SMS-C 40);

a packet switch data network configured to assign network addresses in a dynamic fashion (page 6, 57th paragraph and Figs. 1-2, the application requests the GSM/GPRS network 10 to activate a packet data service to be used by the GPRS station 20 and then receives a dynamically allocated IP address from GSM/GPRS network 10 via GSM/GPRS network);

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a client device configured to send and receive packet switched and circuit switched communications over the packet switched data network and the circuit switched data network, respectively (Fig. 2, wireless communication station 20); and

a central authority configured to send a circuit switch message to the client device through the circuit switched data network requesting that the client device register with the central authority through the packet switch data network (page 5, 55th – 56th paragraphs, the server 30 connects to the Short Message Service Center (SMS-C) and submits a request to the SMS-C 40 to transmit an SMS short message to a GPRS mobile station 20 having a particular Mobile Station Integrated Services Digital Network (MSISDN) number. The SMS-C 40 sends an SMS message to the GPRS station 20 through the GSM/GPRS network 10 over a GSM signaling channel. Herein, the GSM signaling channel is a circuit-switched signaling channel),

Johansson does not disclose that the central authority is further configured to send a new circuit switch message to the client device if the client device has not communicated with the central authority for a predetermined time.

Vance discloses sending another SMS message to the client if the client does not respond to the server for a period of time (Fig. 6, blocks 602-604). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include the feature of resending message to the client device if no feedback is received at the server in Johansson's system, as suggested by Vance, to conclude and verify that status of the connection.

With respect to claim 26, Johansson discloses that wherein the circuit switch message sent to the client device is a short message service message (Fig. 2, SMS short message is used as a request).

With respect to claim 27, Johansson discloses that wherein the central authority is further configured to receive a packet switched registration message from the client device in response to the circuit switched message sent to the client device (page 6, 58th paragraph and Fig. 2, arrow 4, the GPRS application prepares a response message to be transmitted to the server 30. This response message is now transmitted over the established TCP/IP connection).

With respect to claim 28, Johansson discloses that wherein the central authority is further configured to extract a packet data network address associated with the client device from the packet switch registration message received from the client device (page 6, 59th paragraph, the server application extracts and analyses the included information in the response message. Herein, the message is TCP/IP message therefore it includes the allocated IP address of the GPRS station 20 when it activates a PDP context).

With respect to claim 29, Johansson discloses that wherein the central authority comprises a database configured to store information related to the client device and wherein the central authority is configured to update the data stored in the database based on the information contained in the received packet switched registration message (Fig. 2, the server 30 includes

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memory 33 and 34 for storing information relating to the GPRS station 20, including any updated network address of the GPRS station 20).

With respect to claim 30, Johansson discloses that wherein the central authority is further configured to update the information stored in the database on the packet data network address extracted from the received packet switch registration message (page 6, 59th paragraph and Fig. 2, the server application extracts, analyses, and stores the included information in the response message in server's memory).

With respect to claim 31, Johansson discloses that wherein the central authority is further configured to send a message to the client device using the packet data network address stored in the database (Fig. 1, the server 30 sends a request to the GPRS station 20 via TCP/IP connection 1. Herein, the server already knows the network address of the GPRS station 20 as stored in its database 33 and 34).

With respect to claims 32-33, Johansson discloses that wherein the central authority is further configured to send the circuit switched message to the client device using a circuit switched network address associated with the client device and wherein the circuit switched network address is a mobile identification number associated with the client device (page 5, 55th – 56th paragraphs, that the server 30 connects to the Short Message Service Center (SMS-C) and submits a request to the SMS-C 40 to transmit an SMS short message to a GPRS mobile station 20 having a particular Mobile Station Integrated Services Digital Network (MSISDN) number).

With respect to claim 34, Johansson discloses a shared secret that is shared between the client device and the central authority, wherein the shared secret is used for authentication (page 5, 56th paragraph, that the SMS message could include an activate code and if the code corresponds to a predefined code which is accepted by the application, the application processing proceeds).

With respect to claim 35, Johansson discloses that wherein the central authority is further configured to encrypt the circuit switched message sent to the client device using the shared secret (page 5, 56th paragraph, that the SMS message includes an activate code and if the code corresponds to a predefined code which is accepted by the application, the application processing proceeds).

With respect to claim 36, Johansson discloses that wherein the central authority comprises a random or pseudo-random number generator and wherein the circuit switched message sent to the client device includes a random or pseudo-random number generated by the random or pseudo-random number generator (page 5, 56th paragraph, that the SMS message could include an activate code and if the code corresponds to a predefined code which is accepted by the application, the application processing proceeds).

With respect to claim 37, Johansson discloses that wherein the central authority is further configured to encrypt the circuit switched message sent to the client device using a random or pseudo-random number generator by the random or pseudo random number generator (page 5,

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56th paragraph, the SMS message could include an activate code and if the code corresponds to a predefined code which is accepted by the application, the application processing proceeds).

With respect to claim 38, Johansson discloses that wherein the central authority is further configured to receive a packet switched registration message from the client device in response to the circuit switched message sent to the client device, and wherein the central authority is further configured to extract an authentication factor from the packet switched registration message received from the client device (page 6, 59th paragraph).

Allowable Subject Matter

3. Claims 1-10, 14-24, 39-40, and 42-50 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art does not teach or fairly suggest the central authority configured to send a circuit switch message to the client device through the circuit switched data network requesting that the client device register with the central authority through the packet switch data network; wherein the client device is further configured to include a packet switched network address with a packet switched registration message sent to the central authority and to send a new packet switched registration message over the packet switched data network whenever the packet switched data network assigns the client device a new packet switched network address, as specified in independent claims 1 and 39.

Response to Arguments

4. Applicant's arguments with respect to claims 1-10, 13-40, and 42-50 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANH-VU H. LY whose telephone number is (571)272-3175. The examiner can normally be reached on Monday-Friday 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Anh-Vu H Ly/
Primary Examiner, Art Unit 2616

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